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The Law Office of Steven G. Roeder
5560 Chelsea Avenue
La Jolla, CA 92037

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| EXAMINER |
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KLIMOWICZ, WILLIAM JOSEPH

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| ART UNIT | PAPER NUMBER |
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2652

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,295

Applicant(s)

SCHRECK ET AL.

Examiner

William J. Klimowicz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10, 14-16, 18, 23, 24, 31-36, 39-41, 44-46, 48, 52, 53, 59-66 and 70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims withdrawn from consideration are 8,9,11-13,17,19-22,25-30,37,38,42,43,47,49-51,54-58,67-69 and 71-80.

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DETAILED ACTION

Election/Restrictions

Applicants' election with traverse of Group II, Species VI, and Sub-species A (which Applicants allege to read on claims 1-10, 13-16, 18, 23-24, 31-41, 43-46, 48, 52, 53, 59-68 and 70) in Paper No. 4 (filed November 10, 2003) is acknowledged. The traversal is on the ground(s) that the Grouped inventions and Species, Sub-species are not independent and distinct, and that a search for additional inventions would not impose a serious burden upon the Examiner.

This is not found persuasive because the Examiner maintains that the restriction is proper and that a search for the plethora of distinct inventions would indeed impose a grave and serious burden upon the Examiner, as evidenced by, *inter alia*, the number of distinct inventions.

Moreover, the Examiner maintains all that is required to show a restriction is proper, in addition to being a serious burden to the Examiner, is that the inventions be independent or distinct, not independent and distinct as Applicants apparently would have the Examiner believe.

More specifically, as set forth in MPEP § 803:

Under the statute an application may properly be required to be restricted to one of two or more claimed inventions only if they are able to support separate patents and they are either independent (MPEP § 806.04 - § 806.04(i)) *or* distinct (MPEP § 806.05 - § 806.05(i)). [Emphasis in bold italics added].

Moreover as set forth in MPEP § 802.01, the meaning of independent “and” distinct within the context of Patent Office restriction policy and practice is articulated as follows:

35 U.S.C. 121 quoted in the preceding section states that the Commissioner may require restriction if two or more “independent and distinct”

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inventions are claimed in one application. In 37 CFR 1.141, the statement is made that two or more "independent and distinct inventions" may not be claimed in one application.

This raises the question of the subjects as between which the Commissioner may require restriction. This, in turn, depends on the construction of the expression "independent and distinct" inventions.

"Independent", of course, means not dependent. If "distinct" means the same thing, then its use in the statute and in the rule is redundant. If "distinct" means something different, then the question arises as to what the difference in meaning between these two words may be. The hearings before the committees of Congress considering the codification of the patent laws indicate that 35 U.S.C. 121: "enacts as law existing practice with respect to division, at the same time introducing a number of changes."

The report on the hearings does not mention as a change that is introduced, the subjects between which the Commissioner may properly require division.

The term "independent" as already pointed out, means not dependent. A large number of subjects between which, prior to the 1952 Act, division had been proper, are dependent subjects, such as, for example, combination and a subcombination thereof; as process and apparatus used in the practice of the process; as composition and the process in which the composition is used; as process and the product made by such process, etc. If section 121 of the 1952 Act were intended to direct the Commissioner never to approve division between dependent inventions, the word "independent" would clearly have been used alone. If the Commissioner has authority or discretion to restrict independent inventions only, then restriction would be improper as between dependent inventions, e.g., the examples used for purpose of illustration above. Such was clearly not the intent of Congress. Nothing in the language of the statute and nothing in the hearings of the committees indicate any intent to change the substantive law on this subject. On the contrary, joinder of the term "distinct" with the term "independent", indicates lack of such intent. The law has long been established that dependent inventions (frequently termed related inventions) such as used for illustration above may be properly divided if they are, in fact, "distinct" inventions, even though dependent.

Thus, clearly, the restriction is proper if the Examiner shows that the invention are distinct or independent, but not necessarily both independent and distinct.

Additionally, it is noted that the Applicants did not traverse on the ground that the species and/or sub-species are not patentably distinct. If the Applicants were to traverse on the ground that the species are not patentably distinct, the Applicants should submit evidence or identify

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such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. If the Applicants were to include such a statement, the election requirement would be withdrawn. In either instance, however, if the Examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

Moreover, it is noted that claims 8, 9, 13, 37, 38, 43, 67 and 68, which Applicants have indicated as being readable on the elected invention are in fact directed to a non-elected invention. Claims 8, 37 and 67 are directed to non-elected Sub-specie B, and claims 9, 38 and 68 are directed to non-elected Sub-specie C. Additionally, claims 13 and 43 are also directed to a non-elected Species IV (see Restriction Requirement, Paper No. 3, mailed October 9, 2003).

The restriction requirement is still deemed proper and is therefore made FINAL.

Thus, claims 8, 9, 11-13, 17, 19-22, 25-30, 37, 38, 42, 43, 47, 49-51, 54-58, 67-69 and 71-80 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

Claims 1-7, 10, 14-16, 18, 23, 24, 31-36, 39-41, 44-46, 48, 52, 53, 59-66 and 70 have been examined on the merits, *infra*.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on

Applicant
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sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 31, 32, 34-36, 39, 40, 44-46, 48, 52 and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by IBM Technical Disclosure Bulletin "Flexible Magnetic Disk Stabilizer," November 1977, Vol. No. 20, Issue No. 6, pages 2378-2379, Cross Reference 0018-8689-20-6-2378, referred to hereinafter as IBM TDB '2378.

As broadly set forth in claim 31 (and also claims 1 and 61, rejected, *infra*), (IBM TDB '2378) discloses a storage disk (e.g., integrated disk structure 4, 1 and 5) for a disk drive, the storage disk (4, 1, 5) comprising: a body region (1); a first side region (4) secured to the body region (1); and a substantially opposed second side region (5) secured to the body region (1); wherein the side regions are asymmetrical relative to the body region (1).

Note that at least independent claims 1, 31 and 61, are broad enough to read on a conventional disk drive having a single sided magnetic storage surface (having magnetic layer on one side and a substrate on the other with no magnetic layer). The Examiner, however, has at this time, cited document (IBM TDB '2378). The Examiner suggests amending the overly broad claims so as to obviate conventionally known structure so as to expedite prosecution on the merits to preclude any future claim rejections on such known prior art, which may occur, based on any potential amendments and/or arguments.

As per claims 32 (and claims 3 and 63, rejected *infra*), wherein the first side region (4) is adapted to store data, and the second side region (5) is not adapted to store data.

As per claims 34 (and claims 5 and 64, rejected *infra*), wherein the first side region (4) includes a magnetic layer, and the second side region (5) does not include a magnetic layer.

As per claim 35 (and claims 6 and 65, rejected *infra*), wherein the first side region (4) includes a first layer (magnetic material layer of (4)) and the second side region (5) includes a

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second layer (layer of fan blade (6)), the first layer and the second layer being “substantially” equidistant from the body region (1) - see Figures of (IBM TBD ‘2378), wherein the first layer (4) is formed from a material having a first composition, and the second layer is formed from material having a second composition that is different from the first composition (e.g. the composition of layer (4) is such that magnetic information can be stored and retrieved therefrom while the composition of (5) is not adapted for such storage of data - it includes a fan blade (6)).

As per claims 36 (and claims 7 and 66, rejected *infra*), as is evident from the Figures, the first side region (4) has a mass that is different than a mass of the second side region (5) - the layer (4) is thin and flexible, while the material (5) including blades (6) is rigid and much larger.

As per claims 39 (and claims 10 and 70, rejected *infra*), wherein the second side region (5) includes a stiffener (including blades (6)) that increases the rigidity of the storage disk (4, 1, 5).

As per claims 44 (and claims 14 and 70 rejected *infra*), wherein the stiffener (6) redirects fluid within a drive housing during rotation of the storage disk (4, 1, 5).

As per claims 45 (and claim 15, rejected *infra*), wherein the stiffener (6) is substantially arc-shaped - see Figures of (IBM TBD ‘2378).

As per claims 46 (and claim 16, rejected *infra*), wherein the storage disk (4, 1, 5) includes a plurality of stiffeners (6) that increase the rigidity of the storage disk (4, 1, 5).

As per claims 40, 48 (and claim 18, rejected *infra*), wherein the second side region (5) includes an outer flat section (5) and wherein each of the stiffeners (6) is raised above the outer flat region (5).

As per claims 52 (and claim 23, rejected *infra*), wherein the second side region (5)

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includes an outer flat section (5) and a plurality of projections (6) that extend above the outer flat section (5).

As per claim 59, wherein the first side region (4) has a first shape and the second side region (5) has a second shape, and wherein the first shape is different than the second shape.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 10, 14-16, 18, 23, 24, 33, 41, 53, 60-66 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over (IBM TBD '2378).

See the description of (IBM TBD '2378), *supra*.

As per claims 2 and 62, wherein the storage disk (4, 1, 5) includes a first side region (4), a spaced apart second side region (5) and a body region (1) that is positioned between the side regions, the side regions being asymmetrical relative to the body region (see enclosed Figures of (IBM TBD '2378)).

With regard to claims 1, 60 and 61, although (IBM TBD '2378) does not expressly disclose a disk drive inclusive of a housing (and method of forming such a disk drive) so as to enable spinning of the disk, Official notice is taken that disk drive housings including elements to enable disk rotation (e.g., a disk drive spindle motor) are notoriously old and well known and ubiquitous in the art; such Officially noticed fact being capable of instant and unquestionable

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demonstration as being well-known.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the disk, as taught by (IBM TBD '2378), within a conventional and ubiquitous disk drive.

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the disk, as taught by (IBM TBD '2378), within a conventional and ubiquitous disk drive in order to utilize the advantages of the disk of (IBM TBD '2378) (e.g., an inexpensive disk within a conventional disk drive) within its intended operating environment.

Additionally, as per claims 4 and 33, the second side region (5) does not include any servo sectors (since it is not adapted to store data of any kind). However, (IBM TBD '2378) remains silent with respect to wherein the first side region includes a plurality of servo sectors on its data side.

Official notice is taken that servo sectors on magnetic information disk media of the type disclosed by (IBM TBD '2378), are notoriously old and well known and ubiquitous in the art; such Officially noticed fact being capable of instant and unquestionable demonstration as being well-known.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the disk, as taught by (IBM TBD '2378), with a servo sector within data-side (4) as is conventional and ubiquitous.

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the disk, as taught by (IBM TBD '2378), with a servo sector within data-side (4) as is conventional and ubiquitous in order to accurately position the head (7) of (IBM TBD '2378) on

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the intended data track to record/reproduce information in an accurate manner, as is well known, established and appreciated in the art.

As per claims 24, 41 and 53, although (IBM TBD '2378) remains silent with respect to the particular dimensions of the disk, including wherein at least one of the projections (6) is raised above the outer flat region (5) by at least approximately 0.001 millimeters (claim 24, 41, 53), it is notoriously old and well known in the disk and disk drive art to routinely modify a disk structure in the course of routine optimization/ experimentation and thereby obtain various standard optimized relationships including those set forth in claims 24, 41 and 53.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have had the disk (4, 1, 5) of (IBM TBD '2378) have at least one projection (6) being a minimum of 0.001 millimeter above the flat surface (5) (as per claims 24, 41 and 53).

The rationale is as follows: one of ordinary skill in the art would have been motivated to have had the disk (4, 1, 5) of (IBM TBD '2378) have at least one projection (6) being a minimum of 0.001 millimeter above the flat surface (5) (as per claims 24, 41 and 53) in order to generate the desired sufficient vacuum as required by the disk of (IBM TBD '2378).

Moreover, absent a showing of criticality (i.e., unobvious or unexpected results), the relationships set forth in claims 24, 41 and 53 are considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which when the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

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It furthermore has been held in such a situation, the Applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions. See *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

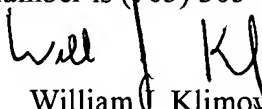
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (703) 305-3452. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


William J. Klimowicz
Primary Examiner
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WJK

November 24, 2003